

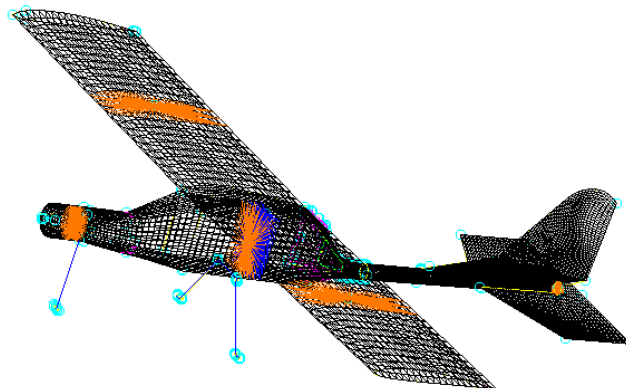


AEROSPACE TRAINING PROPOSAL

FROM

DSN AEROSPACE CONSULTANTS PVT. LTD.

(An **ISO 9001-2008** Company)



www.dsnaerospace.com

Corporate Identity Number: U74900WB2013PTC198785



**DSN AEROSPACE
CONSULTANTS PVT. LTD.**

About the Company

DSN Aerospace Consultants Pvt. Ltd., an ISO 9001-2008 certified company is a pioneer in India in providing high quality Aerospace Training services. Our basic and core competencies lie in providing technical training services and consultancies to Professional Engineers, Engineering college students, OEM's (Original Equipment Manufacturers) and service industries. After training almost 200 students from 6 different Colleges and Universities from the Southern and Eastern part of our country, we are now spreading our wings to our entire nation. Faculty member of DSN Aerospace are erstwhile scientists and engineers of ISRO, HAL & ADA in our country with more than 10 years' experience. With our continuous endeavor towards providing high quality training services to Mechanical, Aeronautical and Aerospace engineers, we strive to bridge the gap between students and industry experts.

List of colleges in which Training is provided

1. **Jadavpur University**, Kolkata, INDIA
2. **M. S. Ramaiah Institute of Technology**, Bangalore, INDIA
3. **Acharya Institute of Technology**, Bangalore, INDIA
4. **SCT College** Bangalore, INDIA
5. **Mangalore Institute of Technology and Engineering**, Mangalore,
INDIA
6. **Khaja Bandhenawaj College of Engineering**, Gulbarga, Karnataka,
INDIA

Business Proposal:

- DSN Aerospace wants to arrive at a MOU for training Professionals/ students in the field of Aerospace Engineering with colleges/ Institutions.
- DSN Aerospace owns Original Licensed software to be used for providing training. So the Universities, Colleges or Institutions with whom MOU is to be arrived at, need not spend money to buy Original Licensed softwares.
- Marketing to colleges/Universities in India will be done by DSN Aerospace Consultants Pvt. Ltd.
- DSN Aerospace would like to utilize facilities/ Labs available in the college/ Institution premises for training students.
- Profit sharing between DSN Aerospace and other Institutions/ colleges will be suitably arrived at.
- DSN Aerospace has got a separate division for Recruitment and Staffing also. DSN Aerospace is closely associated with several OEM's and service industries in India and abroad. Students will be properly guided to explore opportunities in the field of Aerospace and Automobile Engineering in India and Abroad.
- DSN Aerospace will organize guest lectures by Industry experts from ISRO, DRDO, ADA, NAL and HAL.

- Classrooms/ Seminar halls, depending on number of students enrolling for the course are to be leased out by colleges/institutions to DSN Aerospace. Classrooms however will not be occupied during usual college timings. Classrooms will be occupied mostly during evening and weekends.
- Colleges/ Institutions in collaboration with DSN Aerospace can come up with new course offering to students for 6 months / 1 year certification/ graduation program on Aerospace Engineering.
- Colleges / Institutions may also consider introducing Aerospace Engineering as a course work in the 7th or 8th Semester.
- DSN Aerospace would also like to conduct webinars through facilities provided by colleges / institutions.
- DSN Aerospace would like to conduct classes on Sunday's as well in order to facilitate Professors from IIT's taking few classes.

List of companies, a student can apply for job after attending training program from DSN Aerospace Consultants Pvt. Ltd.

OEM's (Original Equipment Manufactures)

°AIRBUS INDUSTRY °BOMBARDIER °EMBRAER °BOEING
 °HAL °NAL °ISRO °DRDO °CSIR LABS °DST °MERCEDES
 BENZ °VOLVO °MAHINDRA AEROSPACE °TATA-HAL
 °TATA TECHNOLOGIES °TATA ADVANCED MATERIALS LIMITED

Service Providers of Aerospace Industries

°CADES °INFOTECH °INFOSYS °TCS °CAPGEMINI °ATKINS
°CYIENT °AXIS INDUSTRIES °AERO EURO INDUSTRIES °TECH
MAHINDRA/ SATYAM °HCL °P3 VOITH GmbH °MRO FACILITIES
OF AIR INDIA, HAL, BOEING AND LUFTHANSA

What way the training benefits Professionals/ students

- Employment opportunities of the student increases manifold. The jobs a student can expect are prestigious and highly paid.
- Internship of 6 months or 1 year duration is equivalent to a job experience. This experience can be utilized in getting better jobs.
- Great opportunity for knowledge enhancements in the field of Aerospace Engineering. The student becomes equally adroit in applying for jobs in Automobile companies.
- Students planning for higher studies in India and Abroad will be highly benefited.
- Aerospace companies, particularly in Germany and UK appreciate knowledge gained from DSN Aerospace.

- Engineering analysis skill level will be increased manifold. The same can be extended to Aerospace, Automobiles, Civil and Architectural structures.
- DSN Aerospace helps students to acquaint themselves with design practices followed in Aero Industries around the world.
- Training will be provided using MSC softwares like MSC NASTRAN & MSC PATRAN which is used by all global OEM's for analysis.
- Case studies considered are actual engineering problems in Aerospace Industries.
- Students will be provided with certificates mentioning the training program one opts for. Softwares used for training are most sophisticated and recognized around the world. Students however have to pass an exam conducted by DSN Aerospace in order to get entitled for receiving the certificate.
- Students will be guided through proper channel which will enable them get a job.

List of Training programs presently on offer:-

1. Detail design of **Launch Vehicle structure**. Understanding the concepts of Stage integration of Rocket Structure.
2. **Introduction to Theoretical concepts of Wing and Fuselage design** following standard text book like: Analysis and Design of Flight Vehicle Structure by **Bruhn**, Airframe Stress analysis and sizing by **Michael C Y Niu**.
3. **Sizing of Wing Structure** of an Aircraft with Hand Calculation and FEM analytical validation of the same using MSc software.
4. **Sizing of Empennage Structure** of an Aircraft with Hand Calculation and FEM based analytical validation of the same using MSc software.
5. **Sizing of Fuselage Structure** of an Aircraft with Hand Calculation and FEM based analytical validation of the same using MSc software.
6. **3D modeling** of mechanical engineering components pertaining to Launch Vehicles and Aircrafts using NX 8.5 software.
7. **2D drawing** of mechanical engineering components pertaining to Launch Vehicles and Aircrafts using NX 8.5 software.
8. **Design and analysis of composite structures**, like composite rocket tanks, composite wing, composite fuselage etc. using MSc Software.
9. **Life estimation of Aircraft and Launch vehicle structural parts** (with Hand calculation and using FEM MSc Fatigue software) using stress life (S-N) method and strain life (E-N) method.

10. ***Introduction to Fracture mechanics concepts.*** Study of crack Propagation life of 2D and 3D structural components with Hand calculation and using MSc Fatigue software.
11. ***Introduction to Aerodynamics and its application*** following standard text books like: Introduction to Aerodynamics of Flight by Theodore A Talay, NASA SP-367.
12. Introduction to the analysis of ***Non Linear Engineering structure*** using MSc Software. Solving example problem pertaining to nonlinear structure.
13. ***Study of buckling of metallic and non-metallic structure.*** Analytical validation of the same using MSc Software.
14. Introduction to the Theoretical ***Concepts of Inertia Relief of Airborne structure.*** Application of inertia relief to Airborne structure using MSc software.
15. ***Solving text book (Bruhn) problems*** theoretically with hand calculation and analytical validation of the same using MSc software.
16. ***Theoretical and analytical approach towards estimation of normal modes of vibration*** of mechanical engineering structure.

Brochure containing list of training programs provided by DSN Aerospace Consultants Pvt. Ltd. can be downloaded from the website www.dsnaerospace.com. Request can be sent to marketing@dsnaerospace.com to get a hardcopy of the Brochure.

About our Founder/ Technical Director

Name: NILOY GHOSH

Education: Mtech Machine Design, Jadavpur University
Kolkata.

Position Held in Industry :

1. Scientist at Liquid Propulsion Systems Centre, ISRO for
GSLV upper stage project. (6 years)
2. Fighter Aircraft Designer, HAL Bangalore. (4 years)

International Journal Publication :

*“Finite element contact analysis of Fractal Surfaces”,
Journal of Physics ‘D’, Applied Physics, 40 4245
doi:10.1088/0022-3727/40/14/021*

National Conferences :

1. Niloy Ghosh & Prasanta Sahoo, Finite element analysis of
Elastic contact of MEMS INTERFACES, Proc. Nat. Conf. on emerging
trends in Nanotechnology and Innovations in Design and Manufacturing
(ETNDM-2006), **NIT Rourkela, 2006, 32-42.**
2. Niloy Ghosh & Prasanta Sahoo, Finite element analysis
of Elastic- Plastic Contact of Fractal Surfaces. Proc. 2nd Int. Congress on
Computational Mechanics and Simulation (ICCMS-06), **IIT Guwahati,
2006.**
3. Niloy Ghosh & Prasanta Sahoo, Computer aided synthesis of 3D
Fractal Surface for contact analysis., Proc. All India Seminar on
Advances in Product Design, **NIT Allahabad, 2006, Paper no.3 (1-9).**